

CLAIMS

Having thus described our invention, what I claim as new and desire to secure by Letters Patent is as follows:

1. A system for aggregating and analyzing data from a plurality of data generating machines comprising:
a plurality of data generating machines each transmitting data pertaining to at least one monitored sales event, said at least one monitored sales event capable of corresponding to a plurality of different products from a plurality of sales, distribution or manufacturing sources effectuated or managed by each of said plurality of data generating machines via at least one of a terrestrial, Internet, satellite, and landline network;
at least one computer, responsively connectable to said plurality of data generating machines via said at least one of a terrestrial, Internet, satellite and landline network, receiving and cumulatively storing the data transmitted by each of said plurality of data generating machines corresponding to a predetermined time period, and including at

least one application software program running thereon that analyzes the aggregated data.

2. The system according to claim 1, wherein said plurality of data generating machines is capable of transmitting the data utilizing a plurality of data formats, and wherein said at least one computer stores the plurality reformats and at least one of reformats and interprets the transmitted data utilizing at least one of said plurality of data formats prior to cumulatively storing the transmitted data.

3. The system according to claim 1 wherein the cumulatively stored data on said at least one computer is analyzed to determine at least one of consumer buying habits and preferences.

4. The system according to claim 1 wherein at least one of said plurality of data generating machines has at least one intelligent routing device operatively connected thereto that selects a least cost data transmission path over at least one of said at least one terrestrial, Internet, satellite and landline network.

5. The system according to claim 1 further comprising at least one gateway device performing a data transmission protocol conversion between at least one first network and at least one second network among said at least one of the terrestrial, Internet, satellite and landline networks that operatively communicate with each other.

6. The system according to claim 1 wherein a transceiver in at least one of said plurality of data generating machines transmits data using a same data transmission protocol as one of the respective terrestrial, Internet, satellite and landline networks to which it transmits.

7. The system according to claim 1 wherein each of said plurality of data generating machines comprises a processor with storage configured to accumulate data corresponding to the at least one monitored sales event occurring in each of said plurality of data generating machines, wherein a transceiver transmits the accumulated data to said at least one first computer via at least one of the respective terrestrial, Internet, satellite and landline network.

8. The system according to claim 7 further comprising at least one gateway positioned between at least one of said plurality of data generating machines and at least one of the terrestrial, Internet, satellite and landline network, wherein said at least one gateway enables the transceiver of at least one of said at least one data generating machine and the respective terrestrial, Internet, satellite and landline network to which it transmits to operatively communicate.

9. The system according to claim 7 wherein the processor is configured to accumulate, for each of said plurality of data generating machines, data corresponding to at least one of paper and/or non-paper monies deposited in and/or returned, alarm conditions, machine serial number, machine model, machine address, machine route number, machine owner, product sold, sales price, date and/or time of purchase, length of time product in machine, and number and/or types of products remaining in machine.

10. The system according to claim 7 wherein the processor is configured to accumulate, for each of said plurality of data generating machines, data corresponding to paper and/or non-paper monies deposited

in and/or returned, alarm conditions, machine serial number, machine model, machine address, machine route number, machine owner, product sold, sales price, date and/or time of purchase, length of time product in machine, and number and/or types of products remaining in machine.

11. The system according to claim 1 wherein said at least one computer transmits to at least one of said plurality of data generating machines one or more audible and/or visual advertisements.

12. The system according to claim 11 wherein at least one of the one or more audible and/or visual advertisements provides message content that is provided at least partially in response to the analyzed data.

13. The system according to claim 1 wherein the application software program provides a recommended replenishment schedule and/or replenishment goods for at least one of said plurality of data generating machines.

14. The system according to claim 1, wherein a third party accesses the stored aggregated data via said at least one computer.

15. A method of collecting and aggregating data from a plurality of data generating machines, the method comprising the steps of:

transmitting data pertaining to at least one monitored sales event associated with each of a plurality of data generating machines via at least one of a terrestrial, Internet, satellite, and landline network;

receiving the transmitted data at at least one computer;

storing cumulatively the data transmitted over a predetermined time period by each of the plurality of data generating machines; and

analyzing the cumulatively stored data.

16. The method according to claim 15 wherein the plurality of data generating machines transmits the data utilizing one of a plurality of data formats, and the at least one computer stores the plurality of data formats and at least one of reformats and interprets the transmitted data prior to said storing step.

17. The method according to claim 15 wherein the data is analyzed to determine at least one of consumer buying habits and preferences.

18. The method according to claim 15 wherein at least one of said plurality of data generating machines has at least one intelligent routing device operatively connected thereto that selects a least cost data transmission path over at least one of said at least one terrestrial, Internet, satellite and landline network.

19. The method according to claim 15 further comprising at least one gateway device performing a data transmission protocol conversion between at least one first network and at least one second network among said at least one of the terrestrial, Internet, satellite and landline networks that operatively communicate with each other.

20. The method according to claim 15 wherein at least one application software program is used to analyze the stored data.

21. The method according to claim 15 further comprising the step of transmitting to at least one of the plurality of data generating machines one or more audible and/or visual advertisements that contain message content at least partially in response to the analyzed data.

22. The method according to claim 21 wherein when a consumer makes a data generating machine purchase using a credit card, at least one of the one or more audible and/or visual advertisements are transmitted in response to a consumer profile based on the analyzed data.

23. The method according to claim 21 wherein at least one of the one or more audible and/or visual advertisements is sent in response to an analysis of at least one of the location, time of day, and sales that have occurred during one or more predetermined time periods.

24. The method according to claim 21 wherein at least one of the one or more audible and/or visual advertisements is transmitted at one or more predetermined times.

25. The method according to claim 21 wherein at least one of the one or more audible and/or visual advertisements are transmitted in accordance with a predetermined network transmission cost.

26. The method according to claim 21 wherein at least one of the one or more audible and/or visual

advertisements is transmitted at one or more times corresponding to a predetermined level of network traffic.

27. The method according to claim 15 further comprising the step of selling at least a portion of the cumulatively stored data to a third party.

28. The method according to claim 27 wherein a network transmission discount is provided to the third party who purchases at least a portion of the stored data.

29. The method according to claim 28 wherein access to the aggregated data is provided via at least one application software program for analyzing the data to determine the at least one of consumer buying habits and preferences.

30. The method according to claim 15 further comprising the step of offering at least a portion of the cumulatively stored data for sale.

31. A computer readable medium storing instructions executable by a computer, the instructions instructing

the computer to aggregate and analyze data from a plurality of data generating machines, said instructions comprising:

receiving on at least one computer transmitted data pertaining to at least one monitored sales event over a predetermined time period of each of a plurality of data generating machines via at least one of a terrestrial, Internet, satellite, and landline network;

storing cumulatively the data transmitted by each of the plurality of data generating machines in a first file format; and
analyzing the cumulatively stored data.

32. The computer readable medium according to claim 31 further comprising instructions that direct the at least one computer to at least one of reformat and interpret the transmitted data having a plurality of predefined data formats prior to cumulatively storing the transmitted data.

33. The computer readable medium according to claim 31 further comprising instructions that analyze the cumulatively stored data on the at least one computer to

determine at least one of consumer buying habits and preferences.

34. The computer readable medium according to claim 31 further comprising instructions that direct at least one of the plurality of data generating machines to select a least cost data transmission path over at least one of the at least one terrestrial, Internet, satellite and landline network.

35. The computer readable medium according to claim 31 further comprising instructions that enable an application software program to operatively communicate with the at least one computer.

36. The computer readable medium according to claim 31 further comprising instructions that enable conversion of the first file format to a second file format that is compatible with an application software program used to analyze the data.

37. The computer readable medium according to claim 31 further comprising instructions that enable transmission to at least one of the plurality of data generating machines one or more audible and/or visual

advertisements that contain message content at least partially in response to the analyzed data.

38. The computer readable medium according to claim 31 further comprising instructions that, when a consumer makes a data generating machine purchase using a credit card, transmit at least one audible and/or visual advertisement in response to a consumer profile based on the analyzed data.

39. The computer readable medium according to claim 38 wherein at least one of the one or more audible and/or visual advertisements is sent in response to an analysis of at least one of the location, time of day, and sales that have occurred during one or more previous predetermined time periods.

40. The computer readable medium according to claim 38 wherein at least one of the one or more audible and/or visual advertisements is transmitted at one or more predetermined times.

41. The computer readable medium according to claim 37 wherein at least one of the one or more audible and/or visual advertisements are transmitted in

accordance with a predetermined network transmission cost.

42. The computer readable medium according to claim 37 wherein at least one of the one or more audible and/or visual advertisements is transmitted at one or more times corresponding to a predetermined level of network traffic.

43. The computer readable medium according to claim 31 further comprising instructions that enable at least one second computer to operatively communicate with the at least one computer to analyze the aggregated data to determine at least one of consumer buying habits and preferences.

44. A system for aggregating and analyzing data from a plurality of data generating machines comprising:
means for transmitting data pertaining to at least one monitored sales event, said at least one monitored sales event capable of corresponding to a plurality of different products from a plurality of sales, distribution or manufacturing sources effectuated or managed by each of said means for

transmitting via at least one of a terrestrial,
Internet, satellite, and landline network;

means for receiving and cumulatively storing the data
transmitted by said means for transmitting, said means
for receiving is responsively connectable to said means
for transmitting via said at least one of a terrestrial,
Internet, satellite and landline network; and

means for analyzing the cumulatively stored data.

45 The system according to claim 44, wherein said
means for transmitting data is capable of transmitting
the data utilizing a plurality of data formats, and
wherein said means for receiving and cumulatively
storing the data stores the data and at least one of
reformats and interprets the transmitted data utilizing
at least one of the plurality of data formats prior to
cumulatively storing the transmitted data.

46. The system according to claim 44 wherein the
cumulatively stored data on said means for receiving and
cumulatively storing is analyzed to determine at least
one of consumer buying habits and preferences.

47. The system according to claim 44 wherein said
means for transmitting has at least one intelligent

routing device operatively connected thereto that selects a least cost data transmission path over at least one of said at least one terrestrial, Internet, satellite and landline network.

48 The system according to claim 44 further comprising means for performing a data transmission protocol conversion between at least one first network and at least one second network among said at least one of the terrestrial, Internet, satellite and landline networks that operatively communicate with each other.

49 The system according to claim 44 wherein said means for transmitting data transmits data using a same data transmission protocol as one of the respective terrestrial, Internet, satellite and landline networks to which it transmits.

50. The system according to claim 44 wherein said means for transmitting data comprises a processor with storage configured to accumulate data corresponding to the at least one monitored sales event, and wherein said means for transmitting transmits the accumulated data to said means for receiving and cumulatively storing via at

least one of the respective terrestrial, Internet, satellite and landline network.

51. The system according to claim 50 further comprising means for enabling said means for receiving and cumulatively storing data and said means for transmitting to operatively communicate, wherein said means for enabling is positioned between said means for transmitting and at least one of the respective terrestrial, Internet, satellite and landline network to which it transmits to operatively communicate.

52 The system according to claim 50 wherein the processor is configured to accumulate, for said means for receiving and cumulatively storing, data corresponding to at least one of paper and/or non-paper monies deposited in and/or returned, alarm conditions, machine serial number, machine model, machine address, machine route number, machine owner, product sold, sales price, date and/or time of purchase, length of time product in machine, and number and/or types of products remaining in machine.

53. The system according to claim 50 wherein the processor is configured to accumulate, for said means

for receiving and cumulatively storing, data corresponding to paper and/or non-paper monies deposited in and/or returned, alarm conditions, machine serial number, machine model, machine address, machine route number, machine owner, product sold, sales price, date and/or time of purchase, length of time product in machine, and number and/or types of products remaining in machine.

$\frac{d}{dt} \left(\frac{\partial L}{\partial \dot{x}} \right) = \frac{\partial L}{\partial x}$